REMARKS:

In the foregoing amendments, claims 1-3 were amended and new claims 4-6 were added to the application. Claim 3 was rewritten as an independent claim. The arrangements set forth in the amended and new claims are shown in the drawings of the present application and discussed in the accompanying written description of applicant's specification disclosure. After the foregoing amendments, claims 1-6 are in the application for consideration by the examiner.

In the outstanding Office action, claim 3 was not rejected over prior art. The Official action objected to this claim as containing allowable subject matter, and stated that this claim would be allowable if rewritten in independent form including all the limitations of the base claim and any intervening claims. In the foregoing amendments, claim 3 was rewritten as in independent claim including all the limitations of original claim 1 from which it depended. For these reasons, a formal allowance of claim 3 is respectfully requested.

The Official action set forth a rejection of claim 1 under 35 U.S.C. §102(b) as being anticipated by JP 9-126084 of Umemoto. Claim 1 was also rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. patent No. 6,278,032 of Ruoff *et al.* (Ruoff) in view of Umemoto. Claim 2 was rejected under 35 U.S.C. §103(a) as being unpatentable over Ruoff in view of Umemoto and in

further view of U.S. patent No. 6,637,381 of Stanglmaier *et al.* (Stanglmaier). These rejections were set forth on pages 2-4 of the Official action. In these rejections, the Official action stated that the teachings of Umemoto and Ruoff suggests a structure of a fuel injection nozzle and an inert material supply passage, where the fuel from the fuel injection nozzle is injected toward an inert material supplied from the inert material supply passage. The teachings of Stanglmaier were cited as suggesting a controller for controlling a quantity of the inert material.

Applicant respectfully submits that claims 1, 2, and 4-6 are patently distinguishable from the teachings of Ruoff, Umemoto and/or Stanglmaier within the meaning of 35 U.S.C. §102 or 35 U.S.C. §103.

Applicant's claims 1 and 5 define, *inter alia,* a fuel passage communicating with the inert material supply passage that is adapted to pass through the fuel injected from the fuel injection nozzle. Claims 1 and 5 further define a fuel injection nozzle adapted to inject a fuel toward the interior of a combustion chamber of the diesel engine, and an inert material supply passage from which an inert material with respect to the fuel is supplied. Claim 1 further defines a fuel passage communicating with the inert material supply passage that is adapted to pass through the fuel injected from the fuel injection nozzle. Claim 5 includes a similar limitation where the fuel from the fuel injection nozzle passes through a holding portion of the inert material supply

passage. These limitations in claim 1, especially that a fuel passage communicates with the inert material supply passage that is adapted to pass through the fuel injected from the fuel injection nozzle, are also present in claim 3, which was indicated as containing allowable subject matter in the outstanding Office action.

Figures 2a and 2b of Ruoff propose an arrangement including nozzle bore 3.8 for the injection of fuel and a sealing joint 7.1/sealing seat 3.9 combination for passing of supplementary fluid into the combustion chamber. This arrangement proposed by Ruoff does not contemplate or suggest the arrangement of an inert material supply passage, a fuel injection nozzle, and an inert material supply passage, as required in claim 1 or 5. In particular, the aforesaid arrangement proposed by Ruoff does not contemplate or suggest *a fuel passage communicating with the inert material supply passage that is adapted to pass through the fuel injected from the fuel injection nozzle*, where the fuel from the fuel injection nozzle is injected toward an inert material supplied from the inert material supply passage, as required in claims 1 and 5. Namely, the teachings of Ruoff do not contemplate or suggest a fluid passage communicating with the inert material supply passage -- in Ruoff the fuel passageway and the supplemental fuel passageway do not communicate with each other. Therefore, the teachings of Ruoff cannot contemplate or suggest that the fuel passage is adapted to pass the fuel injected from the fuel injection

nozzle through the inert material supply passage, as required in claims 1 and 5.

Claim 5 further defines that the *inert material supply passage includes a holding portion for holding the inert material*, and that *the fuel from the fuel injection nozzle passes through the holding portion of the inert material supply passage, when the fuel is injected toward the inert material supplied from the inert material supply passage.* The teachings of Ruoff do not contemplate or suggest that an inert material supply passage includes a holding portion. Therefore, these teachings cannot contemplate or suggest that the fuel injected from the fuel injection nozzle passes through the holding portion of the inert material supply passage when injected into the interior of the combustion chamber of the diesel engine, as required in claim 5. Therefore, applicant respectfully submits that the presently claimed invention is patently distinguishable from the teachings of Ruoff.

As shown in figure 1 of Umemoto, fuel and water are separately injected into the combustion chamber respectively through fuel injection hole 15 and water injection hole 26. The teachings of Umemoto also do not contemplate or suggest the limitations set forth in claims 1 and 5 in the same manner as discussed above with respect to the teachings of Ruoff. Namely, Umemoto does not contemplate or suggest a fluid passage communicating with the inert material supply passage, nor that the fuel passage is adapted to pass through

the fuel injected from the fuel injection nozzle, as required in claim 1 or 5. Therefore, applicant respectfully submits that the presently claimed invention is patently distinguishable from the teachings of Umemoto.

The teachings of Stanglmaier were cited as suggesting a controller. However, these teachings do not cure or rectify the deficiencies in the teachings of Ruoff and Umemoto that were discussed above. In fact, the teachings of Stanglmaier propose mixing water and an oxygenated fuel prior to injection into the combustion chamber, which is opposite to the arrangements set forth in the present claims and the arrangements proposed by Ruoff and Umemoto. Therefore, it is impossible for the teachings of Stanglmaier to cure or rectify the deficiencies in the teachings of Ruoff and Umemoto.

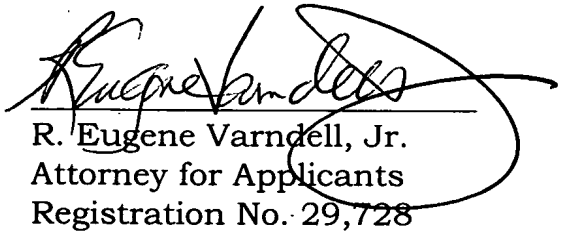
At least for the foregoing reasons, applicant respectfully submits that claims 1-2 and 4-6 are patently distinguishable from the teachings of Ruoff, Umemoto and/or Stanglmaier within the meaning of 35 U.S.C §102. or 35 U.S.C. §103. Therefore, applicant respectfully requests that the examiner reconsider and withdraw the prior art rejections of applicant's claim set forth in the outstanding Office action.

In light of the above, a formal allowance of claims 1-6 is respectfully requested. While it is believed that all the claims in this application are in condition for allowance, should the examiner have any comments or questions,

it is respectfully requested that the undersigned be telephoned at the below listed number to resolve any outstanding issues.

In the event this paper is not timely filed, applicant hereby petitions for an appropriate extension of time. The fee therefor, as well as any other fees which may become due, may be charged to our deposit account No. 22-0256.

Respectfully submitted,
VARNDELL & VARNDELL, PLLC



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